

REMARKS

Claims 1-2, 4-11, 13, 15-19, 21-23, 25-27 and 33-34 are pending in the present application. Claims 3, 12, 14, 20, 24, 28-32, and 35-39 were canceled. Claims 1-2, 13, 15-19, 23, 25, 27 and 33 were amended. Reconsideration of the claims is respectfully requested.

In amending the claims, Claims 1 and 2 have respectively been amended to more clearly emphasize patentable distinguishing features of Applicants' invention.

Claim 13 has merely been cast in independent form and is thus unchanged from original Claim 13.

Claims 15-18 have respectively been amended to depend from Claim 13 rather than canceled Claim 12.

Claim 19 has been amended to incorporate subject matter of canceled Claim 20, and Claim 23 has been amended to incorporate subject matter of canceled Claim 24.

Claim 25 and 27 have each been amended to depend from Claim 1.

Claim 33 has been amended to depend from Claim 13.

In the Office Action, the Examiner objected to respective informalities in Claims 20, 25, 27, 30, 32, 35 and 37. Language objected to in Claims 25 and 27 had been removed in amending these claims. The remaining claims objected to have respectively been canceled.

I. 35 U.S.C. § 112, Second Paragraph

In the Office Action, the Examiner rejected certain of Applicants' claims under 35 U.S.C. § 112, second paragraph, for reciting phrases considered by the Examiner to be indefinite.

Regarding the phrase "the audibly presenting step," Claims 3 and 14 have respectively been canceled.

Regarding the phrase "the document," Claims 19 and 33 have respectively been amended to overcome this rejection, and Claims 28 and 38 have respectively been canceled.

Regarding the phrase "the page", Claim 27 has been amended to overcome this rejection and Claim 32 has been canceled. Applicants respectfully consider that Claim 17 was included in this rejection through oversight, since Claim 17 does not recite the phrase "the page" and does not have a line 17.

Regarding the phrase "a salicnt feature," Claim 19 has been amended to overcome this rejection.

Regarding the phrase "a non-visual manner", Claims 25 and 27 have been respectively amended to overcome this rejection, and Claims 30, 35 and 37 have respectively been canceled.

Therefore, the rejection of Applicants' claims under 35 U.S. § 112, second paragraph has been overcome.

II. 35 U.S.C. § 102, Anticipation

The Examiner has rejected claims 1-39 under 35 U.S. § 102 as being anticipated by U.S. Patent No. 6,564,186 to Kiraly et al.

In making their invention, Applicants sought to make network resources, such as the World Wide Web of the Internet, available to visually impaired persons. In particular, Applicants were concerned with persons who were blind or otherwise required to rely exclusively on audio communication tools, such as Home Page Reader (HPR) or other talking Web browsers. Applicants recognized that with such tools, users who are blind generally cannot be provided with a brief, readily useable summary or overview of web pages. This, of course, is a disadvantage not encountered by those who can visually read or inspect web pages. These concerns of Applicants are set forth in their specification, such as at page 3, lines 3-30 and at page 4, lines 1-4:

Visually impaired users of the Web often rely on tools, such as a talking Web browser. An example of a talking Web browser is the Home Page Reader (HPR), which is available from International Business Machines Corporation (IBM). HPR is a spoken on-ramp to the Information Highway for computer users who are blind or visually impaired. HPR provides Web access by quickly, easily, and efficiently speaking Web page information. HPR provides a simple, easy-to-use interface for navigating and manipulating Web page elements. Using the keyboard to navigate, a user who is blind or who has a visual impairment

can hear the full range of Web page content provided in a logical, clear, and understandable manner.

In perceptual psychology, a notion of gestaltic comprehension is present in which the perception is manifested by understanding the whole rather than analyzing small parts and combining them. For example, when a user views a Web page, a quick glance is all that it takes for the user to decide whether to read the Web page. Often the quick glance is focused on the icons and/or pictures and some heavily enlarged or bolded headlines in the Web page. Unfortunately, with users who are blind, the gestaltic perception of the Web page is more difficult. Part of this difficulty occurs because speech is more sequential than vision.

The present invention recognizes that one problem with talking browsers is that an overview of the page is unavailable because this type of Web browser moves from topic to topic in a sequential manner.

To address the above needs of the blind and other visually impaired persons, Applicants provide the recitation of amended Claim 1, directed to a method in a data processing system for presenting content in a document. As a first step, Claim 1 now recites parsing the document for one or more salient features that collectively provide an overview of the document. This step is clearly disclosed in the application, such as at page 7, lines 23-32 and page 8, lines 1-7, wherein it is stated that:

The mechanism of the present invention allows for a browser executing on a client, such as client 108 to present sufficient portions of content within a document to a visually impaired user so that the visually impaired user is able to obtain an overview of the document. Salient features from a document are selected for presentation to the user. Salient features may include, for example, bold text, italicized text, underlined text, text in a selected color, and text having a certain font size and/or text having a certain position within the document, such as a title, heading, first sentence, etc. These features may be selected in a proxy or a server, such as server 104 and sent via extensible markup language (XML) tags or in resource description framework (RDF) files to the browser at client 108. Alternatively, the mechanism of the present invention may be implemented at client 108 to extract the salient features. (Emphasis added)

As a second step, amended Claim 1 recites initially presenting the document overview to a user in a manner other than visually, the presented overview comprising only the collective salient features, and excluding any other portion of the document. This recitation is also supported by the application teaching set forth above, particularly on page 7, lines 23-27.

Claim 1 further recites presenting a particular one of the other document portions to the user only in response to a request from the user for the particular other portion. Thus, Claim 1 teaches a method whereby a visually impaired person initially receives an overview or summary of a document. The person will then receive other portions of the document only if he or she chooses to do so. Accordingly, Claim 1 provides visually impaired persons with benefits in using networks such as the Web that are already available to those who are not visually impaired. This step is taught in the application, such as at page 8, lines 7-12:

When a new page is sent to the user, the user is provided an option as to whether salient features from the new page are to be presented. If the salient features are presented to the user, the user may choose whether the entire page is to be presented. (Emphasis added)

Applicants consider that the Kiraly et al. reference fails to show or suggest any of the steps of Applicants' amended Claim 1 described above. The purpose of Kiraly, as set forth for example at lines 1-3 of the Kiraly abstract, is to provide "language assistance to a computer user with dyslexia, reading disabilities or visual impairment by presenting text-based information via multiple channels".

The implementation of the Kiraly method is set forth such as at column 2, lines 30-47 and also columns 7, lines 10-15, wherein it is stated that:

The present invention provides for a method of assisting computer users in comprehending and understanding text-based information by simultaneously reinforcing the information via multiple media channels. Particularly, the method of the present invention is implemented in a computer system or embodied in a computer-usable medium in the form of a computer program, and includes the steps of: accessing a source of text-based data, displaying text-based data in a text window with a standard font and size, and/or displaying a portion of the text-based data in another text window with a magnified font and size, sequentially highlighting the text-based data in one or both text windows one word at a time; and generating synthesized speech signals representative of the highlighted word and rendering the synthesized speech signals audible synchronously with the displaying of the highlighted text such that text-based information and corresponding audible information can be perceived simultaneously by the user. (Emphasis added).

In the present embodiment, the text-reader software highlights the text document one word at a time, and sequentially until all the words of the document have been highlighted. More particularly, the present text-reader software highlights the same word in both windows 310 and 320 simultaneously. (Emphasis added)

From the above statements, it is seen that Kiraly teaches that every word of displayed text-based data is highlighted "one word at a time, and sequentially until all the words of the document have been highlighted". Highlighted words are also represented by synthesized speech signals. Clearly, these representative teachings of the Kiraly patent do not disclose or suggest the amended Claim 1 step of parsing a document for one or more salient features, in order to provide an overview of the document. It is readily apparent that the Kiraly arrangement would have no need to provide the overview of Claim 1. Moreover, since the Kiraly reference neither shows nor suggests provision of an overview of a document, such reference also fails to show or suggest the Claim 1 step of presenting only the overview to a user. Finally, the Kiraly method stresses that all the words are to be highlighted for a user, as an essential part of the Kiraly procedure. This concept of Kiraly is considered to emphatically teach away from the Claim 1 step of presenting certain portions of a document to a user only in response to the user's request.

Amended Claim 2 depends from Claim 1, and is considered to patentably distinguish over the art for the same reasons given in support thereof. In addition, Claim 2 is considered to distinguish over the art in reciting the step of presenting the document overview to the user only after the user requests overview presentation. This feature of amended Claim 2 is set forth in the application such as at page 8, lines 7-12, set forth previously herein. Applicants consider that this feature is neither shown nor suggested by the Kiraly reference, and that it would be of no benefit in the arrangement taught and emphasized thereby.

Claim 4-11 respectively depend from Claim 1, and are each considered to patentably distinguish over the art for the same reasons given in support thereof.

In addition, Claim 6 is considered to distinguish over the cited art in reciting that the salient feature is presented in a tactile manner. In the American

Heritage Dictionary, fourth edition, the word "tactile" is defined to mean "Perceptible to the sense of touch".

In the Office Action, the Examiner stated the following in regard to Claim 6:

As to dependent claim 6, Kiraly teaches the salient feature is presented in a tactile manner (e.g., text to be spoken; item 432, Fig 4).

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Item 432 of Fig. 4 of Kiraly is a box containing the statement "AUTOMATICALLY SELECT A SECTION OF TEXT TO BE SPOKEN". Applicants do not believe that this element 432 of Kiraly shows or suggests the recitation of Claim 6, in view of the definition of the word "tactile" set forth above. Moreover, Applicants consider that the recitation of Claim 6 is not shown or suggested elsewhere in the Kiraly reference, and thus clearly distinguishes over such reference.

Claim 13 is directed to a data processing system. As stated above, Claim 13 has been cast in independent form, by incorporating subject matter therein from canceled Claim 12. Claim 13 is considered to distinguish over the art, including the Kiraly reference, particularly in reciting, in the over-all combination of Claim 13, "determining means for determining whether to present additional portions of the document". Such means is very important in embodiments of Applicants' invention. Applicants teach very clearly that a user must be able to determine whether or not to have additional document portions presented, after considering a document overview comprising one or more salient features. However, Kiraly is considered to neither shows nor suggest the Claim 13 determining means, nor does Kiraly teach any need for such means. To the contrary, the Kiraly reference teaches away from such means, for example, at column 7, lines 10-15 previously set forth herein. This section of Kiraly teaches explicitly, at column 7, lines 10-12, that a text document is highlighted, one word at a time, "until all the words of the document have been highlighted". (Emphasis added) This language of Kiraly states clearly that highlighting proceeds until every word in the document has been highlighted. Thus, such language neither requires nor allows a determining means, as recited in Claim 13, in order to determine whether or not to highlight or present additional portions of the document. Since the highlighting procedure of Kiraly applies

to every word of the document, no additional portions are available to be the subject of any such determinations.

In the Office Action, the Examiner stated "as to dependent Claims 13-18, they include the same limitations as in Claim 2-7, and are similarly rejected under the same rationale". Applicants understand from this statement that the Examiner has rejected Claim 13 for the same reason given in rejecting Claim 2. In regard to Claim 2, the Examiner stated:

As to dependent claim 2, Kiraly teaches determining whether to present additional portions of the document (*e.g., after the highlighted text is displayed 'by rendering synthesized speech signals' to the user with visual impairment, the user may decide if he/she wants additional information of the document to be displayed; col. 2, lines 40-57*).

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Kiraly, at the referenced section column 2, lines 40-57, states the following:

...sequentially high-lighting the text-based data in one or both text windows one word at a time; and generating synthesized speech signals representative of the highlighted word and rendering the synthesized speech signals audible synchronously with the displaying of the highlighted text such that text-based information and corresponding audible information can be perceived simultaneously by the user. The present invention is particularly useful for displaying text-based information to users having reading disabilities such as dyslexia as the simultaneous reinforcement of the audio and visual information renders the text-based data easily comprehensible. The present invention may also be used for assisting users with visual impairments in document editing and retrieving information from the World Wide Web. The present invention can yet be employed to increase the comprehension of and entertainment value of text-based information as displayed to computer users, especially young computer users.

Applicants have carefully reviewed the above section of Kiraly, and consider that it reinforces the essential teachings of Kiraly as previously discussed above. That is, the section at col. 2, lines 40-57 clearly discloses sequentially highlighting document text, one word at a time, until all document text has been highlighted. Thus, no additional portion of the document remains available for any further purpose. Accordingly, Applicants do not believe that the determining means of Claim 13, in the over-all

combination of Claim 13, is in any way disclosed or suggested by the above section of Kiraly. Moreover, the Examiner apparently believes that at column 2, lines 40-57, Kiraly teaches that a user may decide if he/she wants additional information of the document to be displayed. However, with all due respect, Applicants have not been able to find any such teaching therein.

Claims 15-18 respectively depend from Claim 13, and are each considered to patentably distinguish over the art for the same reasons given in support thereof.

Independent Claims 19 and 23 respectively recite subject matter similar to subject matter of Claim 13, and are each considered patentably to distinguish over the art for the same reasons given in support thereof.

Claims 21 and 22 respectively depend from Claim 19, and are each considered to patentably distinguish over the art for the same reasons given in support thereof.

Claims 25-27 respectively depend from Claim 1, and are each considered to patentably distinguish over the art for the same reasons given in support thereof.

Claims 33-34 respectively depend from Claim 13, and are each considered to patentably distinguish over the art for the same reasons given in support thereof.

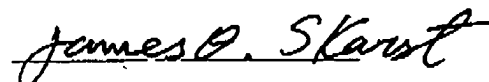
III. Conclusion

It is respectfully urged that the subject application is patentable over the Kiraly et al. reference and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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